CASE REPORT

Mesenteric Lymphangioma – a Rare Tumor of the Abdomen

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Abstract

Mesenteric lymphangioma (ML) is a cystic tumor developed at the base of the mesentery, which occurs frequently in children, rarely in adults, with nonspecific symptoms, often diagnosed late. The diagnosis is made by computer tomography and the curative treatment is the surgical one with good results and with optimal postoperative outcome. A 44-year-old patient for whom mesh surgery for incisional hernia post appendectomy has been performed was admitted to our clinic for non-specific gastrointestinal symptoms for which he has also been investigated multiple times in other services. On the right flank and iliac fossa, a tumor of firm-elastic consistency is detected, relatively well delimited. Computed tomography (CT) describes the lesion as a mesenteric tumor. Intraoperatively, a cystic tumor is detected, which is punctured, the biochemical result highlighting the lymphatic character. The surgical treatment was represented by segmental intestinal resection with entero-enteroanastomosis. No postoperative events were reported.

Keywords: mesenteric lymphangioma, cystic tumor, surgical treatment.

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BACKGROUND

Lymphangiomas are benign tumors, usually located in the neck and armpits of children; those in the peritoneal cavity are rare, especially those occurring among adults, the mesentery being the most common location. The clinical picture with which the patient presents may be abdominal distension, intestinal disorders or acute intestinal obstruction, but they have a nonspecific and a polymorphic symptomatology. Preoperative ultrasound imaging, abdominal computed tomography (CT) or abdominal magnetic resonance imaging (MRI) are the diagnostic methods. Complete surgical resection is the curative treatment for ML. We describe the case of a 44-year-old patient who presented with nonspecific gastrointestinal symptoms and whose abdominal CT revealed the presence of a mesenteric localized cystic tumor for which segmental resection was performed.

CASE PRESENTATION

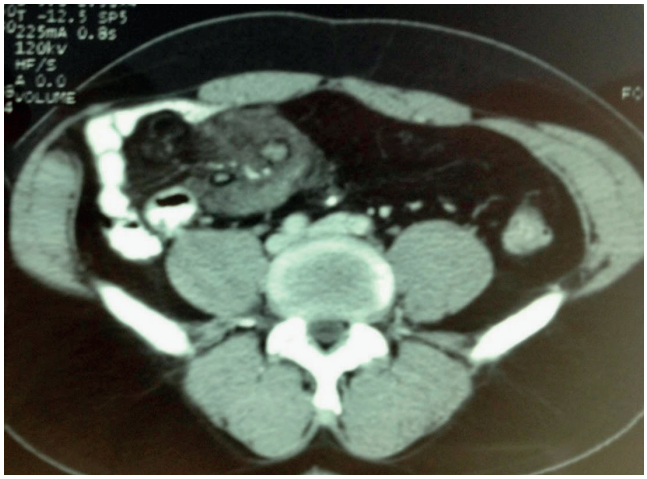
We present the case of a 44-year-old patient, appendicectomized, with a history of post-appendectomy incisional hernia for witch mesh surgery was performed, multiple investigated in other medical departments for abdominal pain syndrome, abdominal flatulence and episodes of diarrhea. The patient was also investigated for Crohn's disease with an non-specific histopathological result.

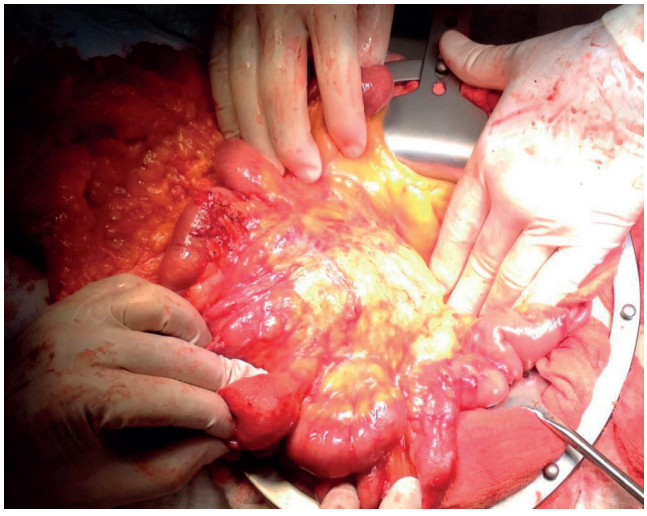
Physical examination shows a patient without cardiovascular sistem and pulmonary sistem without any significant findings with painless abdomen on palpation or spontaneously. The intestinal transit was with a tendency to diarrhea. At the clinical examination on the right flank and iliac fossa, a tumor of about 10/7 cm is palpably detected, being relatively well delimited, painless and with a firmly elastic consistency.

Presumptive diagnosis was non-Hodgkin's malignant lymphoma.

Paraclinical: Regular blood tests within normal limits. Computer tomography shows a fluid filled cystic lesion suggestive aspect of mesenteric localized tumor.

Intraoperatively, an intervisceral and interviscero-parietal adhesion syndrome is detected and also a cystic tumor of about 10/7 cm in diameter located in the mesentery, the tumor was punctured, the biochemical result highlighting the lymphatic character. Biochemical analysis of tumor fluid shows high levels of triglycerides, lactate dehydrogenase and relative low levels of amylase and proteins.





According to the patient's clinical picture, paraclinical examinations (blood tests, CT scans) and intraoperative results, the probable diagnosis is ML.

The surgical treatment was segmental bowel resection including the tumor along with entero-enteroanastomosis. Histopathology report: cystic lymphangioma. The postoperative outcome without any complications.

DISCUSSION

Intra-abdomina ML is a rare bening tumor that is usually manifesting in young people and have nonspecific clinical features[1,2]. Frequently it appears in children before one year old (60% of cases). In adults, lymphangiomas occur mainly on the surface of the body or in the abdominal cavity and the incidence is 1:100000.[5] It is consider a malformation composed by lymphoid tissue and lymphatics vessels, being considered primarily to congenital in origin.

Often it is located in the neck, thoracic and axilar regions (in more than 95% of cases). The abdominal intra-peritoneal localization is rare[4]. In the abdomen,it arise regularly in the mesentery, followed by the mesocolon, omentum, and retroperitoneum, but also ar found in the liver, spleen, kidney, adrenal gland, pancreas.[1]

The preoperative diagnosis is a difficult one because of polymorphous clinical symptomatology. The patient with ML usually has abdominal pain, acute intestinal obstruction, abdominal distension, diarrhea or constipation, hematochezia, hypoproteinemia and fatigability[6]. In adults, it is sometimes found accidentally during auxiliary examinations or exploratory abdominal laparotomy.[3]

Imaging scan are useful in diagnosis. Abdominal ultrasonography (but may be difficult to distinguish) or CT/MRI can be used early in the diagnosis of an incipient cystic tumor located in the abdomen. The gold standard in imaging scan is the abdominal CT scan, giving more information about the size, configuration, and the relation with the adjacent organs. The aspect of this kind of tumor at CT scan is a homogeneous, hypodense, with thin partitions and it is not enhanced by the liquid contrast[4].

Differential diagnosis include: ovarian cyst, hematoma, peritoneal abscess, mucocele of the appendix, pancreatic cystadenoma, sarcomas and malignant cystic adenoma.

Surgical resection is considered the gold standard regarding the treatment options, particularly in abdominal localization of the tumor because it can grow very large and can affect other structures and develop complications. Percutaneous sclerosis can be an efficient therapy, with low risks and could be used in the future[12].

The diagnosis is confirmed by histopathology and provides strong evidence for discerning of other types of cystic tumors.

CONCLUSION

Cystic ML is a benign tumor, the abdominal location being one of the rarest. It has a difficult preoperative diagnosis, with nonspecific symptoms. Persistent symptoms of the patient despite proper medical treatment indicate the need for surgery.

Compliance with ethics requirements: The authors declare no conflict of interest regarding this article. The authors declare that all the procedures and experiments of this study respect the ethical standards in the Helsinki Declaration of 1975, as revised in 2008(5), as well as the national law. Informed consent was obtained from all the patients included in the study.

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